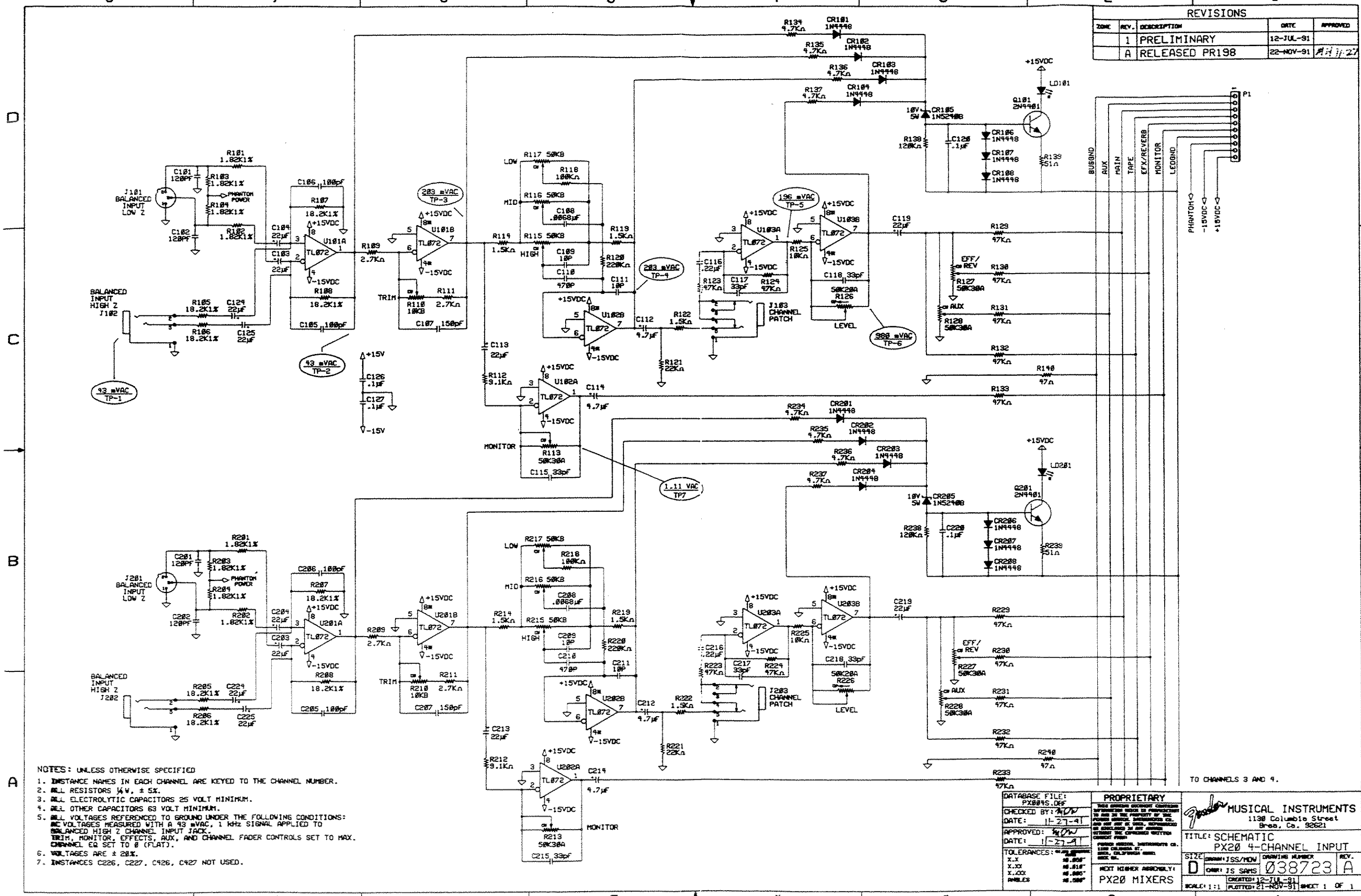


| REVISIONS | | | | |
|-----------|------|----------------|-----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | 1 | PRELIMINARY | 12-JUL-91 | |
| | A | RELEASED PR198 | 22-NOV-91 | M.H.J. |

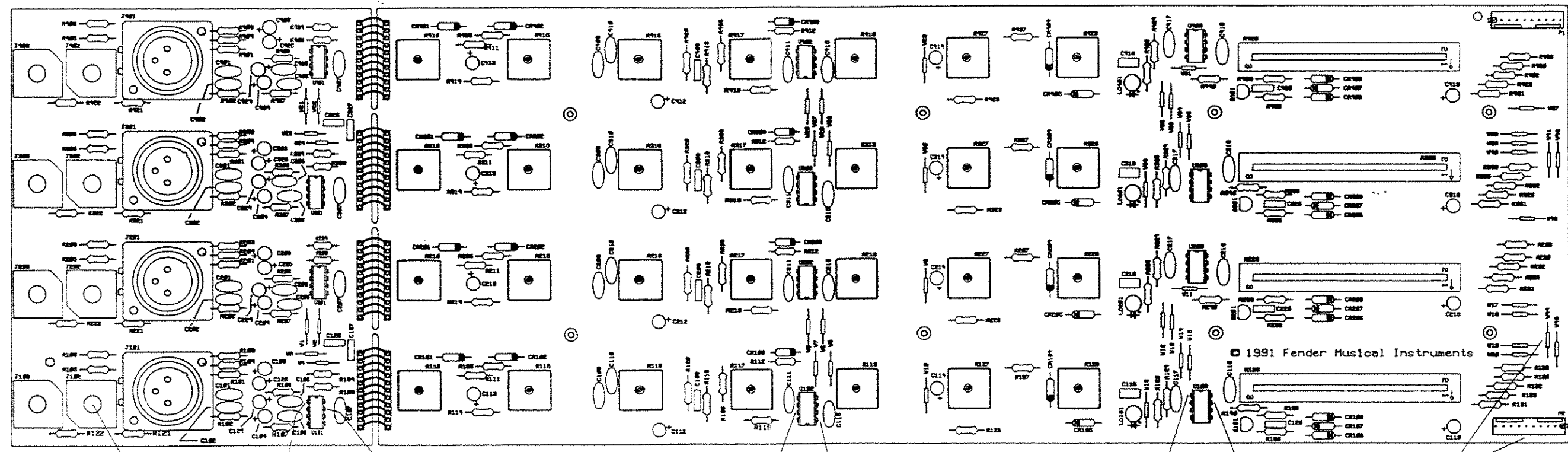


- NOTES: UNLESS OTHERWISE SPECIFIED
1. INSTANCE NAMES IN EACH CHANNEL ARE KEYED TO THE CHANNEL NUMBER.
 2. ALL RESISTORS $\frac{1}{4}$ W, $\pm 5\%$.
 3. ALL ELECTROLYTIC CAPACITORS 25 VOLT MINIMUM.
 4. ALL OTHER CAPACITORS 63 VOLT MINIMUM.
 5. ALL VOLTAGES REFERENCED TO GROUND UNDER THE FOLLOWING CONDITIONS:
 a. VOLTAGES MEASURED WITH A 43 mVAC, 1 kHz SIGNAL APPLIED TO BALANCED HIGH Z CHANNEL INPUT JACK.
 b. TRIM, MONITOR, EFFECTS, AUX, AND CHANNEL FADER CONTROLS SET TO MAX.
 c. CHANNEL EQ SET TO 0 (FLAT).
 6. VOLTAGES ARE $\pm 28\%$.
 7. INSTANCES C226, C227, C426, C427 NOT USED.

| | | |
|--|---|---|
| DATABASE FILE: PX20M5.DBF CHECKED BY: JOW DATE: 11-27-91 APPROVED: JOW DATE: 11-27-91 TOLERANCES: R.X. .1% R.XX .5% R.XXX .1% DIMS .005" | PROPRIETARY THIS DRAWING OR ANY INFORMATION HEREON IS PROPRIETARY TO MUSICAL INSTRUMENTS CO. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. MUSICAL INSTRUMENTS CO. 1138 Columbia Street Brea, Ca. 92621 | TITLE: SCHEMATIC PX20 4-CHANNEL INPUT SIZE: DRAWN: JSS/HOW DRAWING NUMBER: 038723 REV. A NEXT HIGHER ASSEMBLY: PX20 MIXERS SCALE: 1:1 CREATED: 12-JUL-91 PLOTTED: 21-NOV-91 SHEET 1 OF 1 |
|--|---|---|

SHEET 0038781000 1 OF 1

| REVISIONS | | | | |
|-----------|------|----------------|-----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | A | RELEASED PR198 | 22-NOV-91 | MH 11-27 |
| | | | | |
| | | | | |

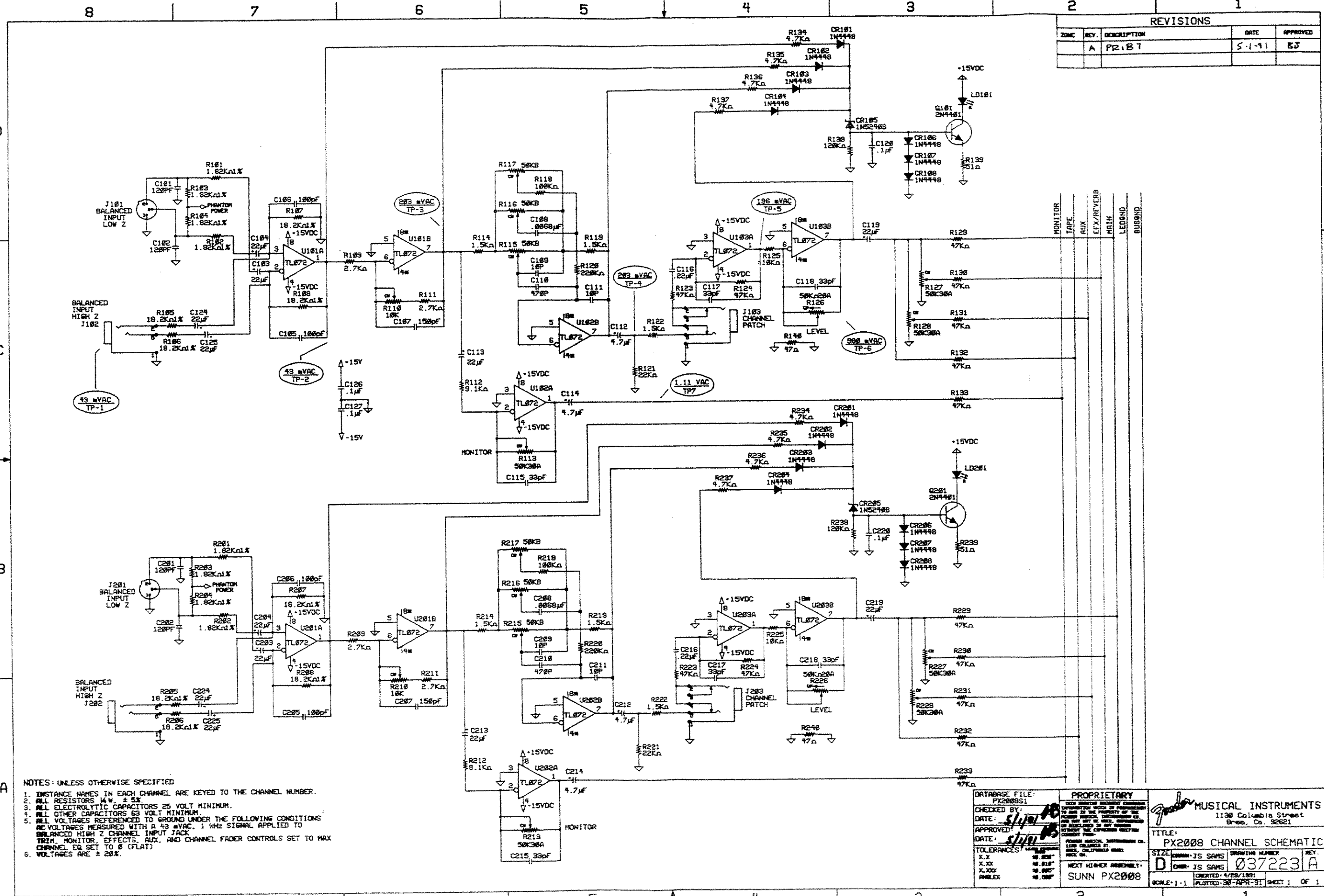


NOTE:
W44, W45, AND P2
ARE NOT INSTALLED
FOR 12-CHANNEL MIXERS.

FILM/DWG: SERVICE DIAGRAM
 DATABASE: PX004SER.DBF DATE: 21-NOV-91
 LAYERS PLOTTED: 1 2 3 4 10
 15 19

| | | |
|--|---|---|
| DATABASE FILE: PX004SER.DBF CHECKED BY: <i>MKW</i> DATE: 11/27/91 APPROVED: <i>MKW</i> DATE: 11/27/91 | PROPRIETARY THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT FROM: FENDER MUSICAL INSTRUMENTS CO. 1130 COLUMBIA ST. BREA, CALIFORNIA 92621 ROCK ON. | Fender MUSICAL INSTRUMENTS 1130 Columbia Street Brea, Co. 92621 TITLE: SERVICE DIAGRAM, PX20 4 CHANNEL PCB SIZE: DRAWN: WILKENS DRAWING NUMBER: 038782 REV. A ENGR: JSS/MDW CREATED: 28-OCT-91 PLOTTED: 21-NOV-91 SHEET 1 OF 1 |
| TOLERANCES: UNLESS OTHERWISE SPECIFIED X.X ±0.650" X.XX ±0.610" X.XXX ±0.605" ANGLES ±0.500° | NEXT HIGHER ASSEMBLY: PX20 4 CHL. INPUT PCB | |

| REVISIONS | | | | |
|-----------|------|-------------|--------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | A | PR. B. T. | 5-1-91 | EJ |

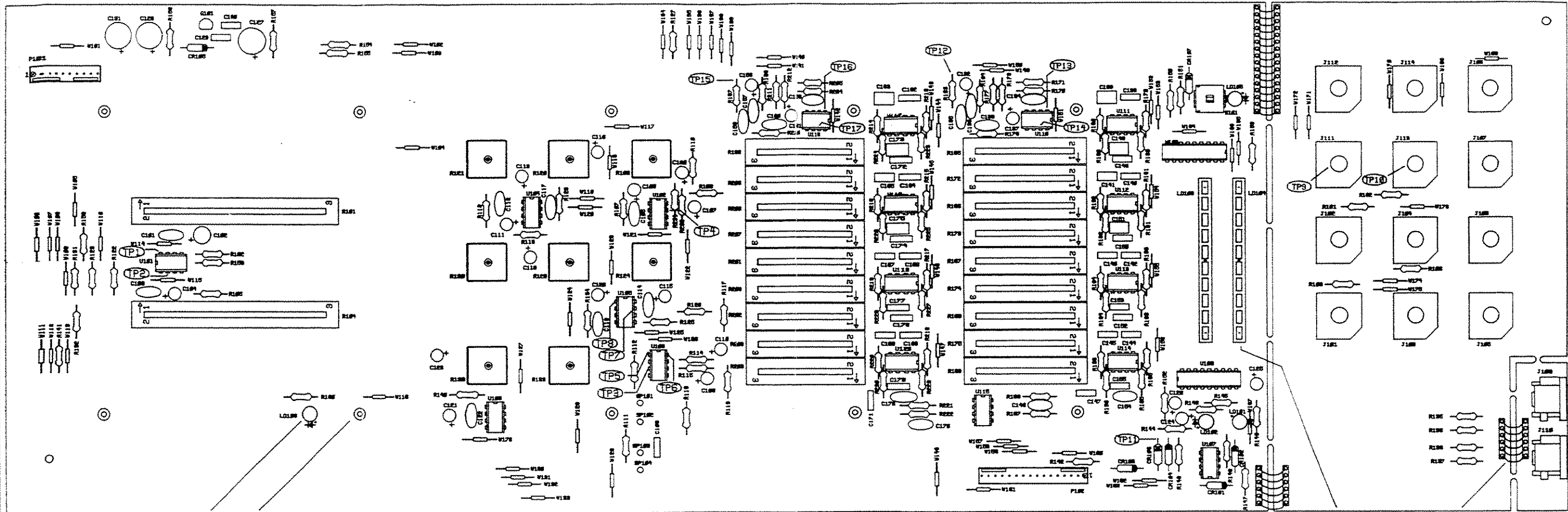


- NOTES: UNLESS OTHERWISE SPECIFIED
1. INSTANCE NAMES IN EACH CHANNEL ARE KEYED TO THE CHANNEL NUMBER.
 2. ALL RESISTORS 1/4 W ± 5%.
 3. ALL ELECTROLYTIC CAPACITORS 25 VOLT MINIMUM.
 4. ALL OTHER CAPACITORS 63 VOLT MINIMUM.
 5. ALL VOLTAGES REFERENCED TO GROUND UNDER THE FOLLOWING CONDITIONS:
AC VOLTAGES MEASURED WITH A 43 mVAC, 1 kHz SIGNAL APPLIED TO BALANCED HIGH Z CHANNEL INPUT JACK.
TRIM, MONITOR, EFFECTS, AUX, AND CHANNEL FADER CONTROLS SET TO MAX.
CHANNEL EQ SET TO 0 (FLAT).
 6. VOLTAGES ARE ± 20%.

| | | |
|---|---|---|
| DATABASE FILE: PX2008S1 CHECKED BY: DATE: APPROVED: DATE: TOLERANCES: X.X .50% X.XX .10% X.XXX .05% ANGLES .05% | PROPRIETARY THIS DRAWING IS THE PROPERTY OF SUNN INSTRUMENTS CO. IT IS TO BE KEPT IN CONFIDENCE AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF SUNN INSTRUMENTS CO. SUNN INSTRUMENTS CO. 1138 Columbia Street Brea, Ca. 92621 TITLE: PX2008 CHANNEL SCHEMATIC SIZE: D DRAWN: JS SAMS CHECKED: JS SAMS DRAWING NUMBER: 037223 REV: A NEXT HIGHER ASSEMBLY: SUNN PX2008 CREATED: 4/29/1991 PLOTTED: 30-APR-91 | MUSICAL INSTRUMENTS 1138 Columbia Street Brea, Ca. 92621 TITLE: PX2008 CHANNEL SCHEMATIC SIZE: D DRAWN: JS SAMS CHECKED: JS SAMS DRAWING NUMBER: 037223 REV: A NEXT HIGHER ASSEMBLY: SUNN PX2008 CREATED: 4/29/1991 PLOTTED: 30-APR-91 |
|---|---|---|

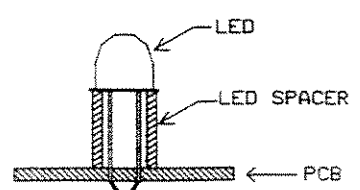
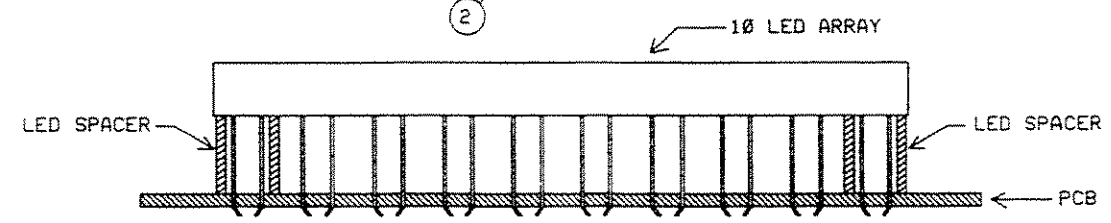
SHEET 1 OF 1
PART NO. 037224

| REVISIONS | | | | |
|-----------|------|-------------|--------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | A | PZ187 | 5-1-91 | ES |
| | | | | |
| | | | | |



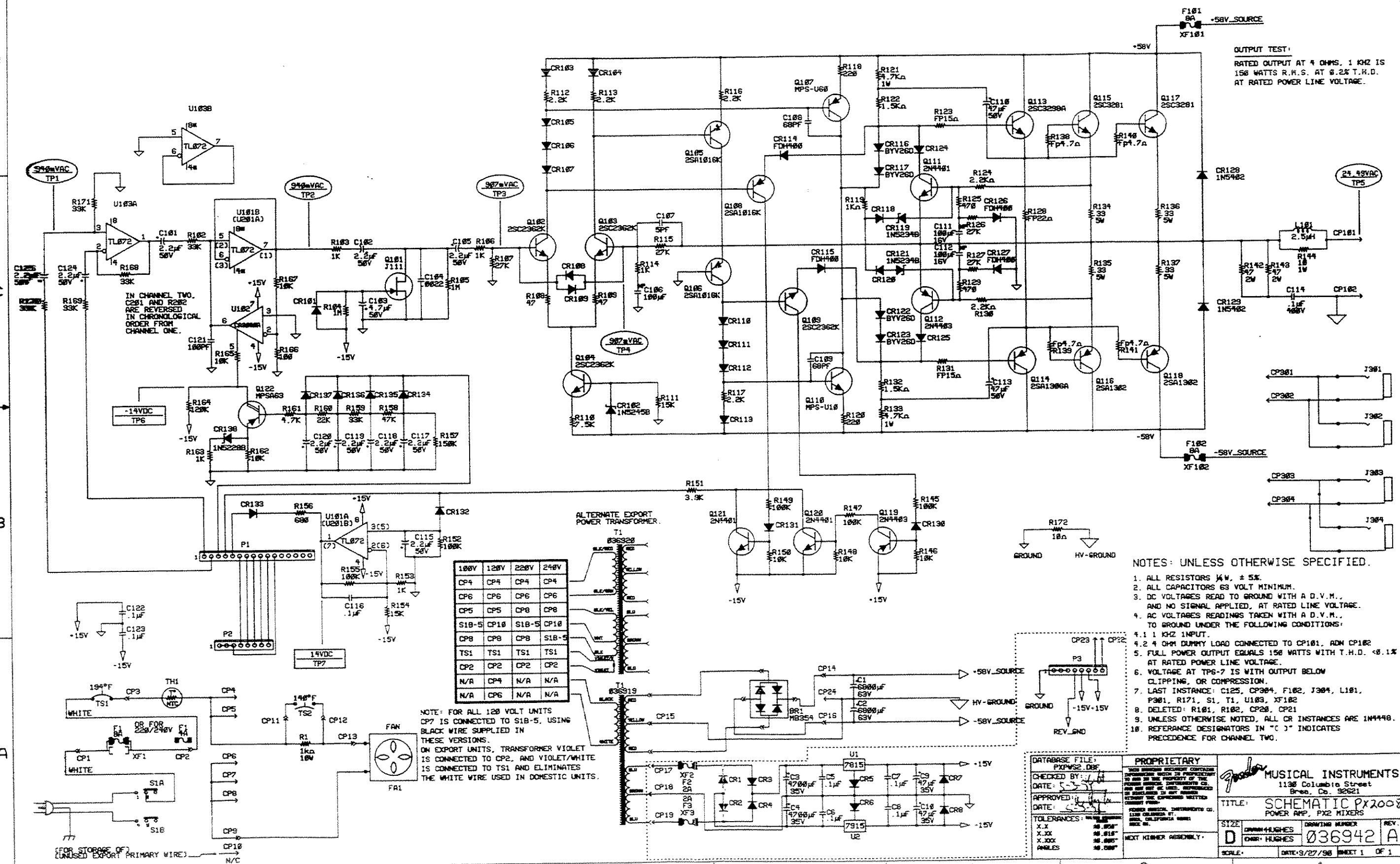
98 99 10 PLACES

FILM/DWG: ASSEMBLY
 DATABASE: PX2008P2.DBF DATE: 29-APR-91
 LAYERS PLOTTED: 1 2 3 4 10 11
 15 18



| | | |
|--|--|--|
| DATABASE FILE: PX2008P2.DBF CHECKED BY: DATE: 5/1/91 APPROVED: DATE: 5/1/91 TOLERANCES: UNLESS OTHERWISE NOTED X.X ±0.050" X.XX ±0.010" X.XXX ±0.005" ANGLES ±0.500° | PROPRIETARY THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT FROM: FENDER MUSICAL INSTRUMENTS CO. 1188 COLUMBIA ST. BREA, CALIFORNIA 92621 ROCK ON. NEXT HIGHER ASSEMBLY: SUNN PX2008 | Fender MUSICAL INSTRUMENTS 1130 Columbia Street Brea, Ca. 92621 TITLE: SERVICE DIAGRAM PX2008 MASTER BOARD SIZE: B DRAWN: J S SAHS ENGR: J S SAHS DRAWING NUMBER: 037230 REV: A CREATED: 4/29/1991 PLOTTED: 29-APR-91 SCALE: 1:1 SHEET 1 OF 1 |
|--|--|--|

| REVISIONS | | | | |
|-----------|------|-----------------|----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | A | RELEASED PR#187 | 2-MAY-91 | |



OUTPUT TEST:
 RATED OUTPUT AT 4 OHMS, 1 KHZ IS
 150 WATTS R.H.S. AT 6.2% T.H.D.
 AT RATED POWER LINE VOLTAGE.

IN CHANNEL TWO,
 C201 AND R202
 ARE REVERSED
 IN CHRONOLOGICAL
 ORDER FROM
 CHANNEL ONE.

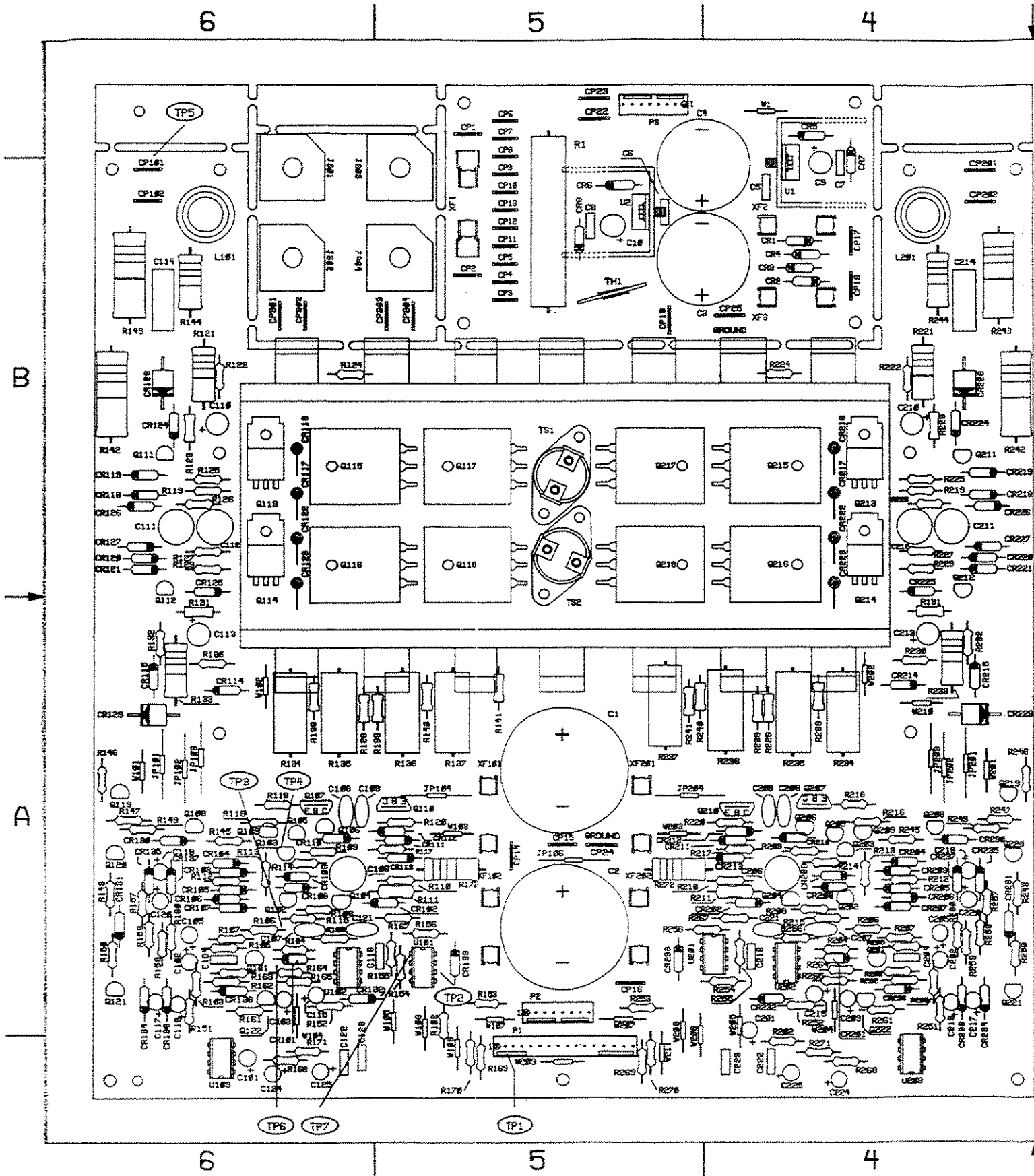
NOTE: FOR ALL 120 VOLT UNITS
 CP7 IS CONNECTED TO S1B-5, USING
 BLACK WIRE SUPPLIED IN
 THESE VERSIONS.
 ON EXPORT UNITS, TRANSFORMER VIOLET
 IS CONNECTED TO CP2, AND VIOLET/WHITE
 IS CONNECTED TO TS1 AND ELIMINATES
 THE WHITE WIRE USED IN DOMESTIC UNITS.

NOTES: UNLESS OTHERWISE SPECIFIED.

1. ALL RESISTORS $\pm 5\%$.
2. ALL CAPACITORS 63 VOLT MINIMUM.
3. DC VOLTAGES READ TO GROUND WITH A D.V.M., AND NO SIGNAL APPLIED, AT RATED LINE VOLTAGE.
4. AC VOLTAGES READINGS TAKEN WITH A D.V.M., TO GROUND UNDER THE FOLLOWING CONDITIONS:
 - 4.1 1 KHZ INPUT.
 - 4.2 4 OHM DUMMY LOAD CONNECTED TO CP101, ADM CP102
 - 4.3 FULL POWER OUTPUT EQUALS 150 WATTS WITH T.H.D. < 8.1% AT RATED POWER LINE VOLTAGE.
5. VOLTAGE AT TP5-7 IS WITH OUTPUT BELOW CLIPPING, OR COMPRESSION.
6. LAST INSTANCE: C125, CP304, F102, J304, L101, P301, R171, S1, U103, XF102
7. DELETED: R101, R102, CP20, CP21
8. UNLESS OTHERWISE NOTED, ALL CR INSTANCES ARE 1N4448.
9. REFERENCE DESIGNATORS IN "C" INDICATES PRECEDENCE FOR CHANNEL TWO.

| | | |
|--|--|--|
| DATABASE FILE: PXPW32.DBF CHECKED BY: DATE: 5-2-91 APPROVED: DATE: 5-2-91 TOLERANCES: X.X .05" X.XX .015" X.XXX .005" ANGLES .005" | PROPRIETARY THIS DESIGN IS THE PROPERTY OF PEARLENE MUSICAL INSTRUMENTS CO. ANY USE OR REPRODUCTION WITHOUT THE EXPRESS WRITTEN CONSENT FROM: PEARLENE MUSICAL INSTRUMENTS CO. 1130 COLUMBIA STREET BREA, CALIFORNIA 92621 TEL: 714/991-1130 | MUSICAL INSTRUMENTS 1130 Columbia Street Brea, Ca. 92621 TITLE: SCHEMATIC PXP2008 POWER AMP, PX2 MIXERS SIZE: DRAWING: HUGHES DRAWING NUMBER: 036942 REV: A SCALE: DATE: 9/27/90 SHEET 1 OF 1 |
|--|--|--|

PART NO 0036943000 SHEET 1 OF 1

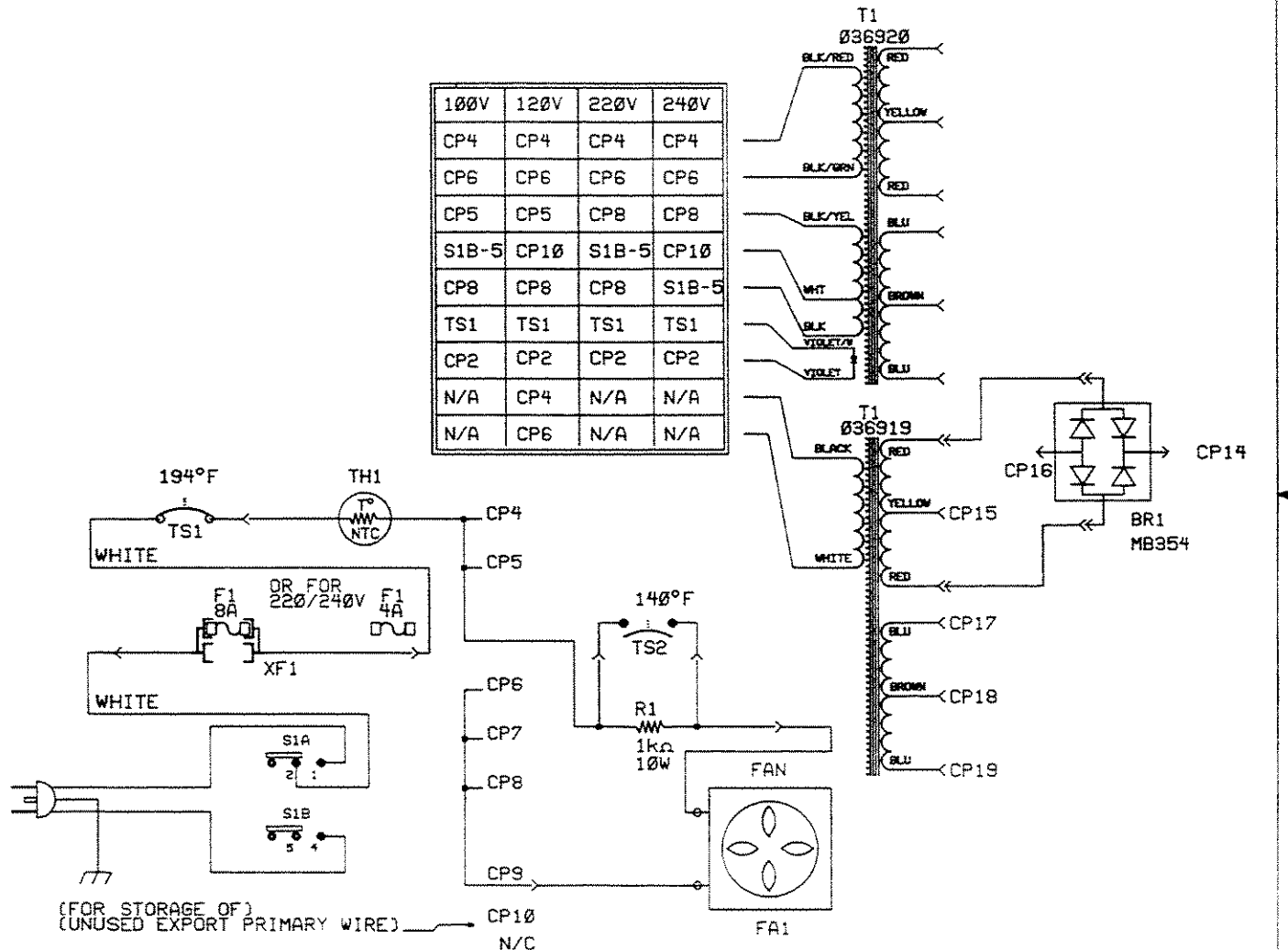


NOTE: FOR ALL 120 VOLT UNITS CP7 IS CONNECTED TO S1B-5, USING BLACK WIRE SUPPLIED IN THESE VERSIONS.
ON EXPORT UNITS, TRANSFORMER VIOLET IS CONNECTED TO CP2, AND VIOLET/WHITE IS CONNECTED TO TS1 AND ELIMINATES THE WHITE WIRE USED IN DOMESTIC UNITS.

| REVISIONS | | | | |
|-----------|------|-----------------|-----------|-------------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | A | RELEASED PR#187 | 22-APR-91 | [Signature] |
| | | | | |

| 100V | 120V | 220V | 240V |
|-------|------|-------|-------|
| CP4 | CP4 | CP4 | CP4 |
| CP6 | CP6 | CP6 | CP6 |
| CP5 | CP5 | CP8 | CP8 |
| S1B-5 | CP10 | S1B-5 | CP10 |
| CP8 | CP8 | CP8 | S1B-5 |
| TS1 | TS1 | TS1 | TS1 |
| CP2 | CP2 | CP2 | CP2 |
| N/A | CP4 | N/A | N/A |
| N/A | CP6 | N/A | N/A |

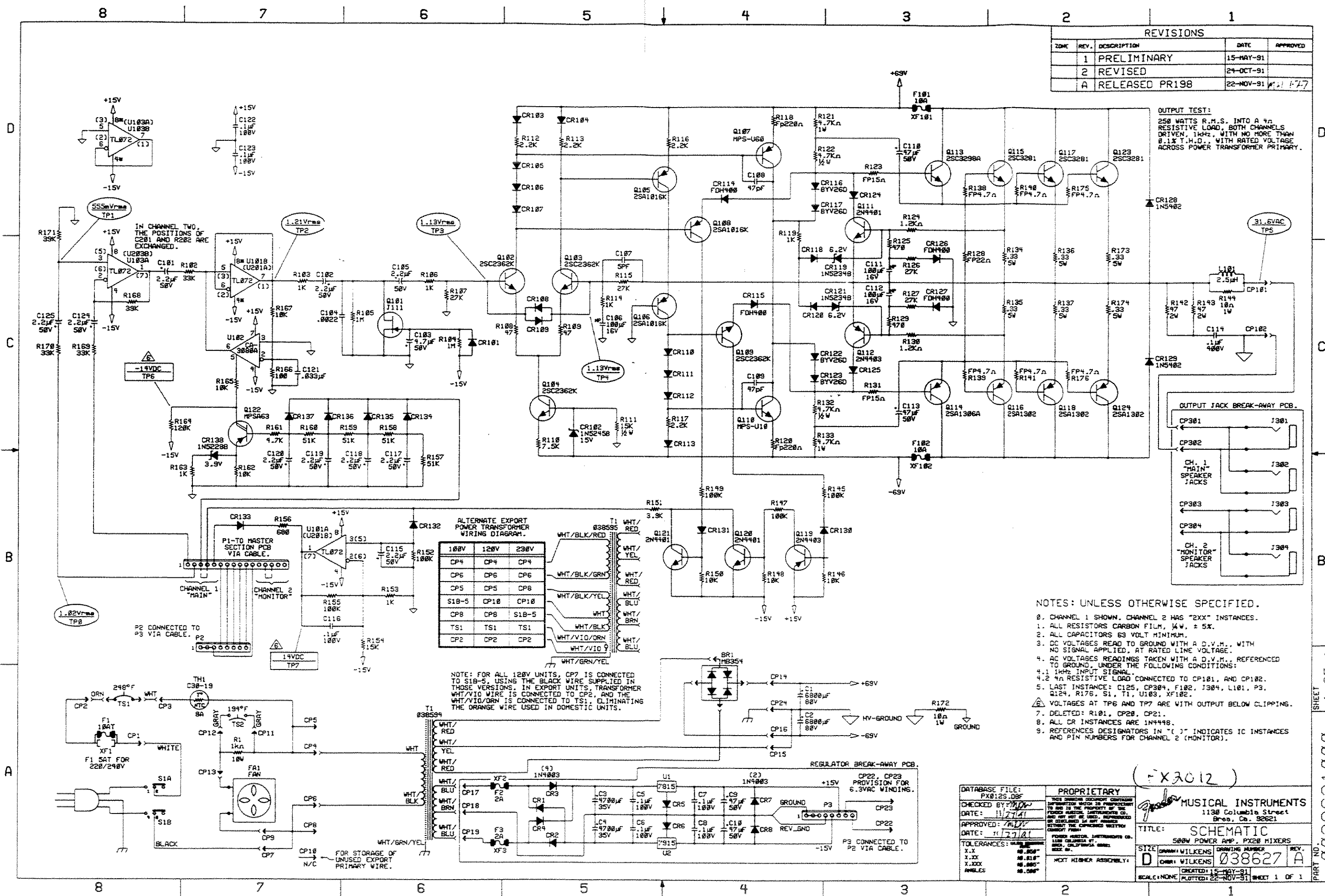
ALTERNATE EXPORT POWER TRANSFORMER.



| | | |
|--|--|---|
| <p>DATABASE FILE:</p> <p>CHECKED BY: [Signature]</p> <p>DATE: 5-3-91</p> <p>APPROVED: [Signature]</p> <p>DATE: 5-3-91</p> <p>TOLERANCES: UNLESS OTHERWISE NOTED</p> <p>X.X .50"</p> <p>X.XX .010"</p> <p>X.XXX .005"</p> <p>ANGLES .500°</p> | <p>PROPRIETARY</p> <p>THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT FROM:</p> <p>FENDER MUSICAL INSTRUMENTS CO. 1130 COLUMBIA ST. BREA, CALIFORNIA 92621 ROCK ON.</p> <p>NEXT HIGHER ASSEMBLY:</p> | <p>Fender MUSICAL INSTRUMENTS</p> <p>1130 Columbia Street Brea, Ca. 92621</p> <p>TITLE: SERVICE DIAGRAM PWR. AMP. PX2008</p> <p>SIZE: D DRAWN: HUGHES DRAWING NUMBER: 038569 REV. A</p> <p>ENGR: HUGHES</p> <p>SCALE: CREATED: 23-APR-91 PLOTTED: 02-MAY-91 SHEET 1 OF 1</p> |
|--|--|---|

| REVISIONS | | | |
|-----------|------|----------------|-----------|
| ZONE | REV. | DESCRIPTION | DATE |
| | 1 | PRELIMINARY | 15-MAY-91 |
| | 2 | REVISED | 24-OCT-91 |
| | A | RELEASED PR198 | 22-NOV-91 |

OUTPUT TEST:
250 WATTS R.M.S. INTO A 4Ω RESISTIVE LOAD, BOTH CHANNELS DRIVEN, 1KHZ., WITH NO MORE THAN 8.1X T.H.D., WITH RATED VOLTAGE ACROSS POWER TRANSFORMER PRIMARY.



IN CHANNEL TWO, THE POSITIONS OF C281 AND R282 ARE EXCHANGED.

ALTERNATE EXPORT POWER TRANSFORMER WIRING DIAGRAM.

| 100V | 120V | 230V |
|-------|------|-------|
| CP4 | CP4 | CP4 |
| CP6 | CP6 | CP6 |
| CP5 | CP5 | CP8 |
| S1B-5 | CP10 | CP10 |
| CP8 | CP8 | S1B-5 |
| TS1 | TS1 | TS1 |
| CP2 | CP2 | CP2 |

NOTE: FOR ALL 120V UNITS, CP7 IS CONNECTED TO S1B-5, USING THE BLACK WIRE SUPPLIED IN THOSE VERSIONS. IN EXPORT UNITS, TRANSFORMER WHT/VIO WIRE IS CONNECTED TO CP2, AND THE WHT/VIO/ORN IS CONNECTED TO TS1, ELIMINATING THE ORANGE WIRE USED IN DOMESTIC UNITS.

- NOTES: UNLESS OTHERWISE SPECIFIED.
- CHANNEL 1 SHOWN. CHANNEL 2 HAS "2XX" INSTANCES.
 - ALL RESISTORS CARBON FILM, 1/4W ± 5%.
 - ALL CAPACITORS 63 VOLT MINIMUM.
 - DC VOLTAGES READ TO GROUND WITH A D.V.M., WITH NO SIGNAL APPLIED, AT RATED LINE VOLTAGE.
 - AC VOLTAGES TAKEN WITH A D.V.M., REFERENCED TO GROUND, UNDER THE FOLLOWING CONDITIONS:
 - 1KHz INPUT SIGNAL.
 - 4Ω RESISTIVE LOAD CONNECTED TO CP101, AND CP102.
 - LAST INSTANCES: C125, CP304, F102, J304, L101, P3, Q124, R176, S1, T1, U103, XF102.
 - VOLTAGES AT TP6 AND TP7 ARE WITH OUTPUT BELOW CLIPPING.
 - DELETED: R101, CP20, CP21.
 - ALL CR INSTANCES ARE 1N4448.
 - REFERENCES DESIGNATORS IN "()" INDICATES IC INSTANCES AND PIN NUMBERS FOR CHANNEL 2 (MONITOR).

REGULATOR BREAK-AWAY PCB.

CP22, CP23 PROVISION FOR 6.3VAC WINDING.

P3 CONNECTED TO P2 VIA CABLE.

DATE: 11/7/91

APPROVED: [Signature]

DATE: 11/7/91

TOLERANCES: ±0.1%
±0.1%
±0.1%
±0.1%
±0.1%
±0.1%
±0.1%
±0.1%
±0.1%
±0.1%

PROPRIETARY

MUSICAL INSTRUMENTS
1138 Columbia Street
Brea, Ca. 92621

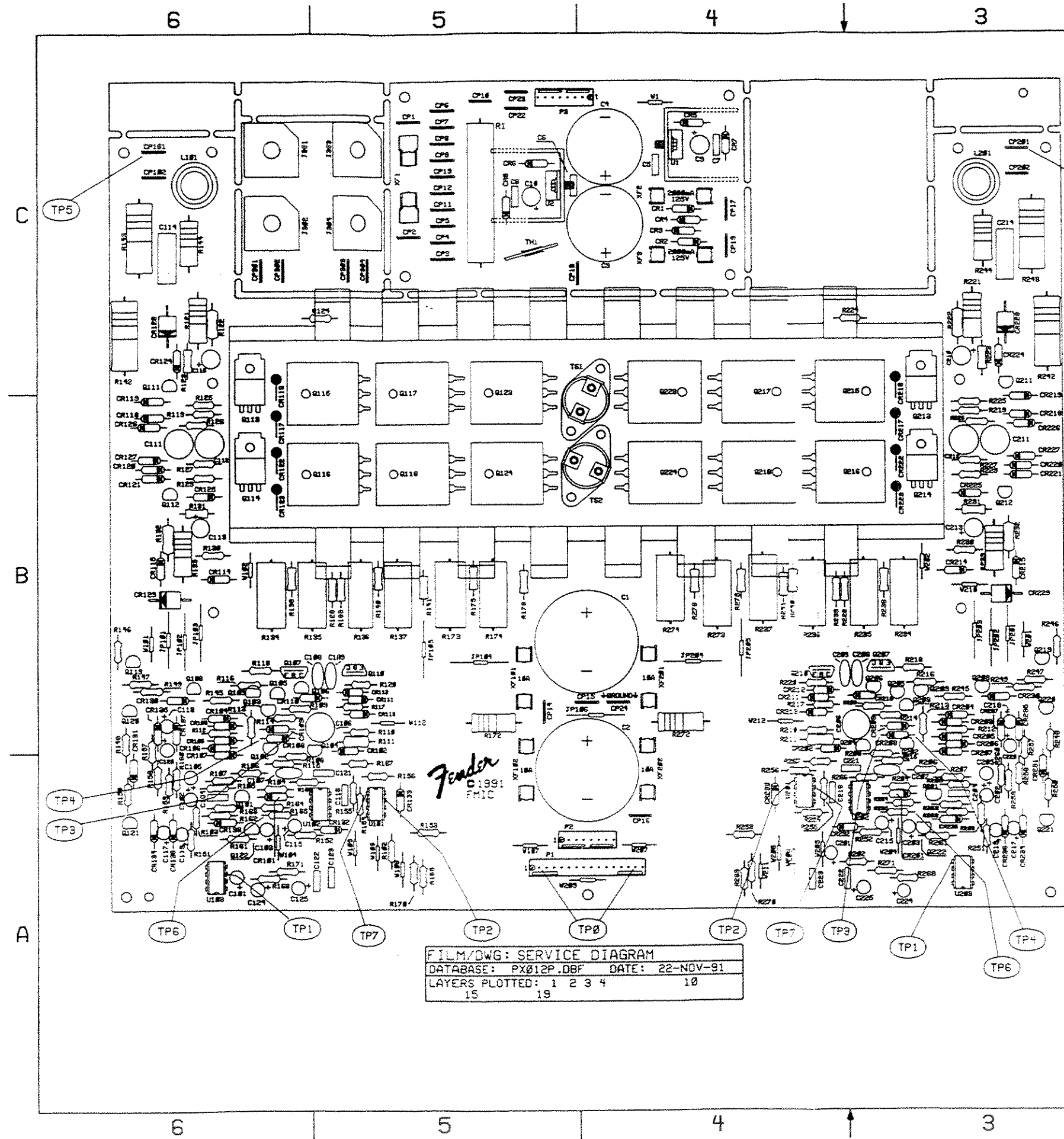
TITLE: SCHEMATIC
500W POWER AMP, PX20 MIXERS

SIZE: D
DRAWN: WILKENS
CHKD: WILKENS
CREATED: 15-MAY-91
PLOTTER: 22-NOV-91

SHEET 1 OF 1

PART NO. 038631000 SHEET 1 OF 1

| REVISIONS | | | | |
|-----------|------|----------------|-----------|----------|
| ZONE | REV. | DESCRIPTION | DATE | APPROVED |
| | A | RELEASED PR198 | 22-NOV-91 | MHW/1-27 |

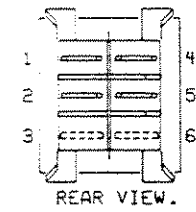
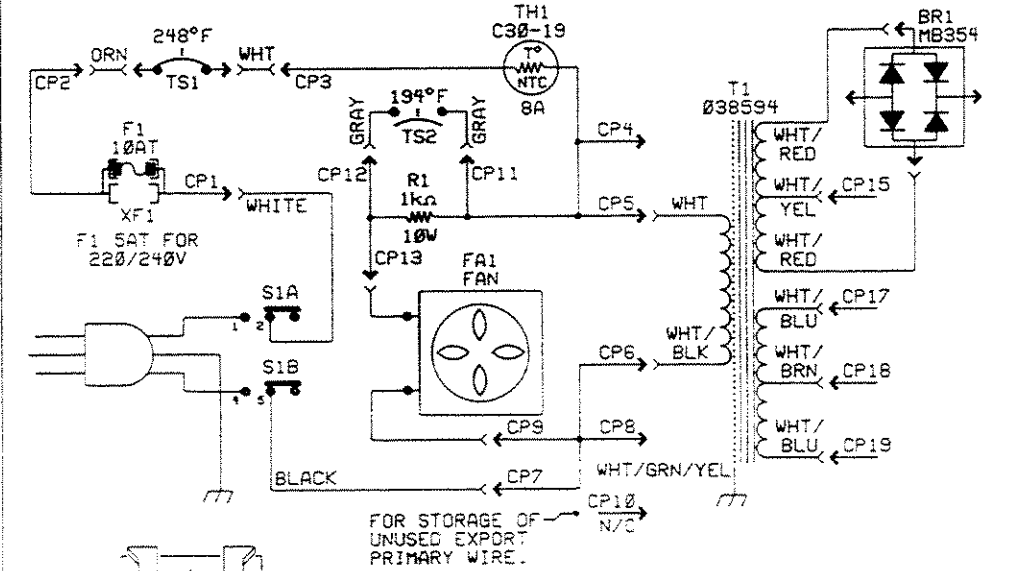


ALTERNATE EXPORT POWER TRANSFORMER WIRING DIAGRAM.

| 100V | 120V | 230V | WIRING | WIRING |
|-------|------|-------|-------------|---------|
| CP4 | CP4 | CP4 | WHT/BLK/RED | WHT/RED |
| CP6 | CP6 | CP6 | WHT/BLK/GRN | WHT/RED |
| CP5 | CP5 | CP8 | WHT/BLK/YEL | WHT/BLU |
| S1B-5 | CP10 | CP10 | WHT | WHT/BRN |
| CP8 | CP8 | S1B-5 | WHT/BLK | WHT/BLU |
| TS1 | TS1 | TS1 | WHT/VIO/ORN | WHT/BLU |
| CP2 | CP2 | CP2 | WHT/VIO | WHT/BLU |

WHT/GRN/YEL

NOTE: FOR ALL 120V UNITS, CP7 IS CONNECTED TO S1B-5, USING THE BLACK WIRE SUPPLIED IN THOSE VERSIONS. IN EXPORT UNITS, TRANSFORMER WHT/VIO WIRE IS CONNECTED TO CP2, AND THE WHT/VIO/ORN IS CONNECTED TO TS1, ELIMINATING THE ORANGE WIRE USED IN DOMESTIC UNITS.



S1A, B POWER SWITCH DETAIL.

FILM/DWG: SERVICE DIAGRAM
 DATABASE: PX012P.DBF DATE: 22-NOV-91
 LAYERS PLOTTED: 1 2 3 4 10 15 19

| | | |
|--|--|---|
| DATABASE FILE: PX012SER.DBF CHECKED BY: MHW DATE: 11/27/91 APPROVED: MHW DATE: 11/27/91 TOLERANCES: UNLESS OTHERWISE NOTED X.X ±0.050" X.XX ±0.018" X.XXX ±0.005" ANGLES ±0.500° | PROPRIETARY THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE COMBINED WRITTEN CONSENT FROM: FENDER MUSICAL INSTRUMENTS CO. 1130 COLUMBIA ST. BREA, CALIFORNIA 92621 ROCK ON. NEXT HIGHER ASSEMBLY: PX20 500W POWER AMP | Fender MUSICAL INSTRUMENTS 1130 Columbia Street Brea, Ca. 92621 TITLE: SERVICE DIAGRAM, 500W POWER AMP, PX20 MIXERS. SIZE: DRAWN: WILKENS DRAWING NUMBER REV. D ENGR: WILKENS 038632 A CREATED: 28-OCT-91 PLOTTED: 22-NOV-91 SHEET 1 OF 1 |
|--|--|---|